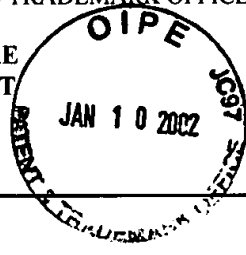


SUBSTITUTE FORM PTO-1449 (MODIFIED) INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary) (37.CFR 1.98(b))	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE 	ATTY. DOCKET NO.: 6125-0001	SERIAL NO.: 09/915,196
		APPLICANT: John P. CUMINGS et al.	
		FILING DATE: July 24, 2001	GROUP: 2879

U.S. PATENT DOCUMENTS							
EXAMINER INITIALS	CITE NO.	PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
* hl	AA	Ser. No. 09/915,207		Cumings et al.			7/24/01
hl	AB	5,958,358	9/28/99	Tenne et al.			
hl	AC	6,231,980	5/15/01	Cohen et al.			11/25/97

OTHER DOCUMENTS — NONPATENT LITERATURE DOCUMENTS		
EXAMINER INITIALS	CITE NO.	INCLUDE NAME OF AUTHOR, TITLE OF ARTICLE (IF APPROPRIATE), TITLE OF PUBLICATION, DATE, PAGE(S), VOLUME-ISSUE NUMBER(S), PUBLISHER, AND PLACE OF PUBLICATION
hl	AD	Charlier et al. (1993), "Energetics of Multilayered Carbon Tubules," <i>Physical Review Letters</i> <u>70</u> (12):1858-1861.
	AE	Cumings et al. (2000), "Low-Friction Nanoscale Linear Bearing Realized from Multiwall Carbon Nanotubes," <i>Science</i> <u>289</u> :602-604.
	AF	Falvo et al. (1999), "Nanometre-Scale Rolling and Sliding of Carbon Nanotubes," <i>Nature</i> <u>397</u> :236-238.
	AG	Kolmogorov et al. (2000), "Smoothest Bearings: Interlayer Sliding in Multiwalled Carbon Nanotubes," <i>Physical Review Letters</i> <u>85</u> (22):4727-4730.
	AH	Yu et al. (2000), "Controlled Sliding and Pullout of Nested Shells in Individual Multiwalled Carbon Nanotubes," <i>J. Phys. Chem. B</i> <u>104</u> :8764-8767.
	AI	Yu et al. (2000), "Strength and Breaking Mechanism of Multiwalled Carbon Nanotubes Under Tensile Load," <i>Science</i> <u>287</u> :637-640.
hl	AJ	Wagner et al. (1998), "Stress-Induced Fragmentation of Multiwall Carbon Nanotubes in a Polymer Matrix," <i>Appl. Phys. Lett.</i> <u>72</u> (2):188-190.

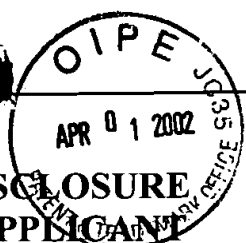
* Not a prior art & inaccessible

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Complete if Known

Application Number	09/915,196
Filing Date	July 24, 2001
First Named Inventor	John P. CUMINGS et al.
Art Unit	2879
Examiner Name	Unassigned
Attorney Docket Number	6125-0001

Sheet	1	of	1
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OTHER DOCUMENT — NONPATENT LITERATURE DOCUMENT

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), Title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
hl	BA	Zettl et al. (2000), "Sharpened Nanotubes, Nanobearings, and Nanosprings," <i>Electronic Properties of Novel Materials – Molecular Nanostructures</i> , No. 544, pp. 526-532, 14th International Winterschoool/Euroconference, Kirchbert, Austria.	

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SUBSTITUTE FORM PTO-1449 (MODIFIED)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO.: 6125-0001	SERIAL NO.: 09/915,196
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		APPLICANT: John P. CUMINGS et al.	
		FILING DATE: July 24, 2001	GROUP: 2879

(37 CFR 1.98(b))

OTHER DOCUMENTS — NONPATENT LITERATURE DOCUMENTS

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bl	AK	Benedict et al. (1998), "Microscopic Determination of the Interlayer Binding Energy in Graphite," <i>Chemical Physics Letters</i> <u>286</u> :490-496.
	AL	Collins et al. (1997), "Nanotube Nanodevice," <i>Science</i> <u>278</u> :100-103.
	AM	Crespi et al. (1999), "Sliding, Stretching, and Tapering: Recent Structural Results for Carbon Nanotubes," <i>Electronic Properties of Novel Materials – Science and Technology of Molecular Nanostructures</i> , Kuzmany et al., Eds., American Institute of Physics, College Park, Maryland, pp. 364-368.
	AN	Cumings et al. (2000), "Peeling and Sharpening Multiwall Nanotubes," <i>Nature</i> <u>406</u> :586.
	AO	Falvo et al. (1997), "Bending and Buckling of Carbon Nanotubes Under Large Strain," <i>Nature</i> <u>389</u> :582-584.
	AP	Falvo et al. (1998), "Nanomanipulation Experiments Exploring Frictional and Mechanical Properties of Carbon Nanotubes," <i>Miscroscopy and Microanalysis</i> <u>4</u> :504-512.
	AQ	Hamada et al. (1992), "New One-Dimensional Conductors: Graphitic Microtubules," <i>Physical Review Letters</i> <u>68</u> (10):1579-1581.
	AR	Iijima (1991), "Helical Microtubules of Graphitic Carbon," <i>Nature</i> <u>354</u> :56-58.
	AS	Iijima et al. (1992), "Growth Model for Carbon Nanotubes," <i>Physical Review Letters</i> <u>69</u> (21):3100-3103.
	AT	Iijima et al. (1996), "Structural Flexibility of Carbon Nanotubes," <i>J. Chem. Phys.</i> <u>104</u> (5):2089-2092.
	AU	Iijima (1998), "Carbon Nanotubes and Their Recent Developments," <i>Proc. IEEE Eleventh Annual International Workshop on Micro Elector Mechanical Systems</i> , IEEE, Heidelberg, Germany, pp. 520-525.
	AV	Kolmogorov et al. (2000), "Barriers to Sliding in Double-Wall Carbon Nanotubes," <i>Bulletin of the American Physical Society, March Meeting 2000</i> <u>45</u> (1):254.
	AW	Paulson et al. (1999), "In Situ Resistance Measurements of Strained Carbon Nanotubes," <i>Applied Physics Letters</i> <u>75</u> (19):2936-2938.
	AX	Persson (1999), "Sliding Friction," <i>Surface Science Reports</i> <u>33</u> :83-119.
	AY	Poncharal et al. (1999), "Electrostatic Deflections and Electromechanical Resonances of Carbon Nanotubes," <i>Science</i> <u>283</u> :1513-1516.
th	AZ	Saito et al. (1992), "Electronic Structure of Chiral Graphene Tubules," <i>App. Phys. Let.</i> <u>60</u> (18):2204-2206.

EXAMINER SIGNATURE:

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DATE CONSIDERED: 10/03

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